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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,891	08/20/2003	Steven M.H. Wallman	1061/6	6367

7590 02/22/2010  
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EXAMINER
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LOFTUS, ANN E

ART UNIT	PAPER NUMBER
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3691

MAIL DATE	DELIVERY MODE
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02/22/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/644,891	<b>Applicant(s)</b> WALLMAN, STEVEN M.H.	
	<b>Examiner</b> ANN LOFTUS	<b>Art Unit</b> 3691	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-7, 28-34 and 55-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 28-34 and 55-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Status of the Claims***

1. This action is in response to an amendment filed on 1/19/10. Claims 1-7, 28-34 and 55-60 are pending. Claims 8-27 and 35-54 are cancelled.
2. The application was filed on 8/20/03 with provisional dated 8/20/02.

### ***Response to Arguments***

3. Applicant's arguments have been fully considered but they are not persuasive.

The applicant argues that Sanders, Rebane, Rangen, Peters and Nolan fail to set forth how to determine how much (an amount) of an investment portfolio to purchase on margin to increase the risk/reward characteristic to match the user's specified risk/reward characteristic. The claim recites determining the amount, and does not specify an algorithm explaining how to determine the amount.

There is no algorithm for determining the amount to buy in the claims; they merely require a risk/reward characteristic to match. This characteristic is not limited to a complex calculation, but can be as simple as "high" or "low" risk classifications. The claim would cover an embodiment with a simple rule that if the user specifies "high," some is bought on margin, else none. Sanders teaches that the determination of how much to buy is made, but not how. Sanders teaches matching a risk/reward characteristic: the share multiple. Rangen makes it clear that buying on margin creates risk. So it is obvious to buy some on margin to meet a "high" risk characteristic.

Whatever method Sanders uses to determine the amount can be used. If the risk/reward characteristic were a precise measurement to be matched instead of a general attribute, or if the matching required some precision, determining how much to buy could be more complex. But matching a risk/reward characteristic can be very simple if the characteristic represents a broad category that is easy to match, and that interpretation is within the claim language. It would have been obvious to a person of ordinary skill in the art in light of the cited art to combine the elements as disclosed to result in an embodiment within the claim language, with predictable results and a reasonable expectation of success.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 6, 7, 28-30, 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application 2001/0042036 filed by 1/25/2001 by Sanders, in view of US Patent 6078904 filed 3/16/98 by Rebane and further in view of Rangen.

Rangen refers to a quote from Stephen Thorlief Rangen, Securities Exchange Act Rel. No. 38486 (Apr. 8, 1977), 64 SEC Docket 731, 736. It was quoted in footnote 27 of Canady, Securities Exchange Act Rel. No. 41250 (April 5, 1999), which is provided to the applicant.

As to claims 1, 7, 28, and 34, Sanders teaches a computerized method for creating a portfolio of a plurality of assets/rights and liabilities having a user specifiable risk/reward characteristic for the portfolio in paragraph 16. An index is understood to consist of a plurality of assets/rights/liabilities as opposed to a single asset. Sanders teaches determining an amount of the desired portfolio that must be purchased in paragraph 16 as submitting an inquiry for a number of investment units. Sanders teaches a user specified risk/reward characteristic in paragraph 16 as a leverage factor/share multiple. Sanders teaches a computerized system, a graphical user interface on a computer (browser) and using an interface to a computerized trading system in paragraph 23 page 2.

Sanders teaches a risk/reward characteristic of a resulting portfolio matches a user specified risk/reward characteristic in paragraphs 53-55. In the example, the user wants a risk/leverage factor of ten, thus a product with a risk/leverage factor of ten is purchased, resulting in a portfolio with a risk/leverage factor of ten. Purchasing a product based on a desired portfolio (underlying index) would not change the allocation of the desired portfolio itself, thus Sanders teaches having said allocation of the plurality of assets/rights/liabilities.

Sanders teaches purchasing the determined amount in paragraphs 16 and 53-55. Sanders teaches leveraged contracts but it does not clearly refer to buying on margin. Rebane teaches buying on margin (borrowed funds) as a known technique in col 10 lines 25-35. The Sanders Rebane combination does not teach the relationship of buying on margin to risk. Rangen teaches that buying on margin increases risk, and

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shows that the risk effects of buying on margin were known at the time of the invention. Since it was known to buy to match a risk/reward characteristic (Sanders, paragraphs 53-55), and that buying on margin increases risk in known ways, it would have been obvious to combine the known elements. A person of ordinary skill in the art would have understood how to combine the elements, with predictable results and a reasonable expectation of technical success, such that the elements functioned as they did separately. The result of the combination would be to buy on margin in order to increase risk to match a user specified risk/reward characteristic. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the Sanders Rebane combination to explicitly add an amount that must be purchased on margin and purchasing on margin in order to adjust the risk of a known product with the benefit of avoiding research on other products. Thus Sanders Rebane Rangen teaches an amount that must be purchased on margin.

Further as to claims 7 and 34 Sanders teaches in paragraph 23 providing a predetermined portfolio of assets rights or liabilities (the list of investment products displayed to user).

Further as to claims 7 and 34, Sanders teaches receiving a user specified riskiness characteristic in paragraph 16. The reception of such a characteristic would be the same action for a characteristic based on a single product or a characteristic based on a combination of the portfolio and a user's investment funds.

Further as to claims 7 and 34, Sanders teaches a risk/reward characteristic for a product, but does not teach a risk/reward characteristic for a combination of assets such

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as a predetermined portfolio and the user's investment funds. Rebane teaches in col 33 how to determine the risk of a combination of assets. It would have been within ordinary logic to modify Sanders, with predictable results and a reasonable expectation of success, to apply Rebane's known technique, to add receiving a user specified risk/reward characteristic for the portfolio and a user's investment funds in order to allow the user to incorporate other assets into the risk determination.

Further as to claims 7 and 34, Sanders teaches purchasing an amount of the predetermined portfolio of the plurality of assets, rights, or liabilities with the user's investment funds in paragraphs 16 and 53-55.

Further as to claims 28 and 34, Sanders teaches a computer in paragraph 23. Sanders does not explicitly teach a display and a user interface and a computer readable media having encoded thereon instructions. Rebane teaches a computer in Fig 4, which shows a display and a user interface and a computer readable media (memory) having encoded thereon instructions, and a processor. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Sanders in view of Rebane to add a display and a user interface and a computer readable media having encoded thereon instructions, and a processor, in order to enable interaction with the programmed instructions.

As to claims 2 and 29, Sanders teaches selecting by a user a risk/reward characteristic (share multiple) of a desired portfolio of a plurality of assets/rights/liabilities in paragraph 16.

As to claims 3 and 30, Sanders teaches a retail customer interface in the abstract. Sanders paragraph 114 says that this interface is in HTML. A person of ordinary skill in the art would understand that a customer interface in HTML would be a graphical user interface.

As to claims 6, and 33, Sanders teaches entering a numerical value (see at least Figure 5, “customer picks a leverage factor between 5 and 20” and paragraph 93).

6. Claims 55-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application 2001/0042036 filed by 1/25/2001 by Sanders, in view of US Patent 6078904 filed 3/16/98 by Rebane in view of Rangen and further in view of US Patent Application 20030088489 filed 12/13/2000 by Peters et al.

As to claim 55, Sanders teaches obtaining a desired risk/reward characteristic for a desired portfolio of assets/rights/liabilities in Fig 5 and paragraph 93. Sanders teaches providing a predetermined portfolio of a plurality of assets /rights/liabilities having a predetermined asset allocation among the plurality of assets/rights/liabilities in paragraph 16 (index).

Sanders does not teach providing a portfolio having a predetermined risk/reward characteristic. Rebane teaches in col 33 how to determine the risk of a combination of assets. Thus applying the known technique of Rebane to Sanders prior to providing the portfolio, results in a portfolio with a predetermined risk/reward characteristic. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Sanders, with predictable results and a reasonable expectation of success, to



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add a portfolio with a predetermined risk/reward characteristic, in order to match the risk tolerance of the user.

Sanders does not teach comparing the risk/reward characteristic obtained previously with the predetermined risk/reward characteristic of the predetermined portfolio. Peters teaches comparing the risk/reward characteristic obtained previously with the predetermined risk/reward characteristic of the predetermined portfolio in paragraphs 93- 94 and claim 1. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Sanders to add comparing the risk/reward characteristic obtained previously with the predetermined risk/reward characteristic of the predetermined portfolio in order to see whether the risk was close to the user's desires.

The Sanders Rebane Rangen combination teaches determining an amount of the predetermined portfolio that must be purchased on margin so that a resulting portfolio matches the desired risk/reward characteristic and purchasing the determined amount of the desired portfolio of the plurality of assets/rights /liabilities as above (see claim 1).

Claim 55 recites that if the desired risk/reward characteristic is higher ... purchasing the determined amount on margin. Claim 56 recites that if the desired risk/reward characteristic is lower, purchasing a determined amount of a low risk investment in combination with an amount of the predetermined portfolio. Sanders does not teach these elements. Peters teaches in paragraph 62 comparing the desired risk/reward characteristic to the predetermined portfolio risk/reward characteristic, and

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changing the investments in the portfolio to match the desired risk/reward characteristic.

Peters does not specifically teach buying on margin to raise the risk/reward

characteristic or buying a low risk investment to lower the risk/reward characteristic.

Rangen teaches that buying on margin increases risk. Rebane shows in col 33 and

elsewhere formulas for determining the risk of loss from a portfolio. A person of ordinary

skill would understand based on these formulas that adding a higher risk investment to

a portfolio raises the risk of the portfolio, and conversely, adding a low risk investment to

a portfolio lowers the risk of the portfolio. It would have been obvious to a person of

ordinary skill in the art at the time of the investment to modify the Sanders Rebane

Rangen combination to add the claimed elements: if the desired risk/reward

characteristic is higher ... purchasing the determined amount on margin, and also if the

desired risk/reward characteristic is lower, purchasing a determined amount of a low

risk investment in combination with an amount of the predetermined portfolio. The

benefit would be to match the risk tolerance of the investor.

As to claim 57, Sanders teaches selecting by a user a risk/reward characteristic (share multiple) of a desired portfolio of a plurality of assets/rights/liabilities in paragraph 16.

As to claim 58, Sanders teaches a retail customer interface in the abstract. Sanders paragraph 114 says that this interface is in HTML. A person of ordinary skill in the art would understand that a customer interface in HTML would be a graphical user interface.

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7. Claim 4 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders in view of Rebane in view of Rangen as applied above, and further in view of Nolan (5,754,873).

The Sanders Rebane Rangen combination does not specifically disclose a *slider bar*. However, Nolan discloses a graphical user interface for scaling a block of text which “scaling preference can be selected using a graphical control, such as a slider bar or dial” (see Column 9, Lines 58-67). It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the slider bar interface element of Nolan into the investment system and method of Sanders in order to provide improved usability.

8. Claim 59 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders in view of Rebane in view of Rangen in view of Peters as applied above, and further in view of Nolan (5,754,873).

The Sanders Rebane Rangen Peters combination does not specifically disclose a *slider bar*. However, Nolan discloses a graphical user interface for scaling a block of text which “scaling preference can be selected using a graphical control, such as a slider bar or dial” (see Column 9, Lines 58-67). It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the slider bar interface element of Nolan into the combination of Sanders, Rebane, Rangen, and Peters in order to provide improved usability.

9. Claims 5 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders in view of Rebane in view of Rangen as applied above, and further in view of Marks et al. (2001/0053944).

As to claims 5 and 32, Sanders and Rebane in view of Rangen does not specifically disclose an *arrow on a dial*. However, Marks discloses a graphical user interface for navigating internet audio which includes dials with arrows on them (see at least Figure 1). It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the dials with arrows interface elements of Marks into the combination of Sanders, Rebane, Rangen, in order to provide improved usability.

10. Claim 60 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sanders in view of Rebane in view of Rangen in view of Peters as applied above, and further in view of Marks et al. (2001/0053944).

As to claim 60, Sanders and Rebane in view of Rangen and Peters does not specifically disclose an *arrow on a dial*. However, Marks discloses a graphical user interface for navigating internet audio which includes dials with arrows on them (see at least Figure 1). It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the dials with arrows interface elements of Marks into the combination of Sanders, Rebane, Rangen, and Peters in order to provide improved usability.

***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANN LOFTUS whose telephone number is (571)272-7342. The examiner can normally be reached on M-F 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kalinowski Alex can be reached on 571-272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AL

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